MICRO FOCUS

# PostgreSQL Appliance 1.2
## Admin UI Reference

**March 2020**

## Legal Notice

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# About This Guide

This guide documents the Micro Focus PostgreSQL appliance, which can provide SQL database services for other Micro Focus appliances that require them.

## Audience

This guide is for Micro Focus PostgreSQL appliance and other Micro Focus appliance administrators.

## Feedback

We want to hear your comments and suggestions about this manual and the other documentation included with this product. Please use the **comment on this topic** link at the bottom of each page of the online documentation.

## Documentation Updates

For the most recent version of this guide, visit the Micro Focus PostgreSQL Appliance documentation web site (http://www.novell.com/documentation/postgresql-1-2).

## Additional Documentation

For links to the documentation for other Micro Focus appliances that can be integrated with the PostgreSQL appliance, visit the Micro Focus PostgreSQL Appliance documentation web site (http://www.novell.com/documentation/postgresql-1-2).

# 1 Overview of the PostgreSQL Appliance

The Micro Focus PostgreSQL appliance provides SQL database services to other Micro Focus appliances, such as Filr and Uinta.

Micro Focus does not support using this appliance to provide database services outside the scope of the services with which it is bundled.

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**IMPORTANT:** If an existing in-house SQL database server is available, you should use that instead of this appliance.

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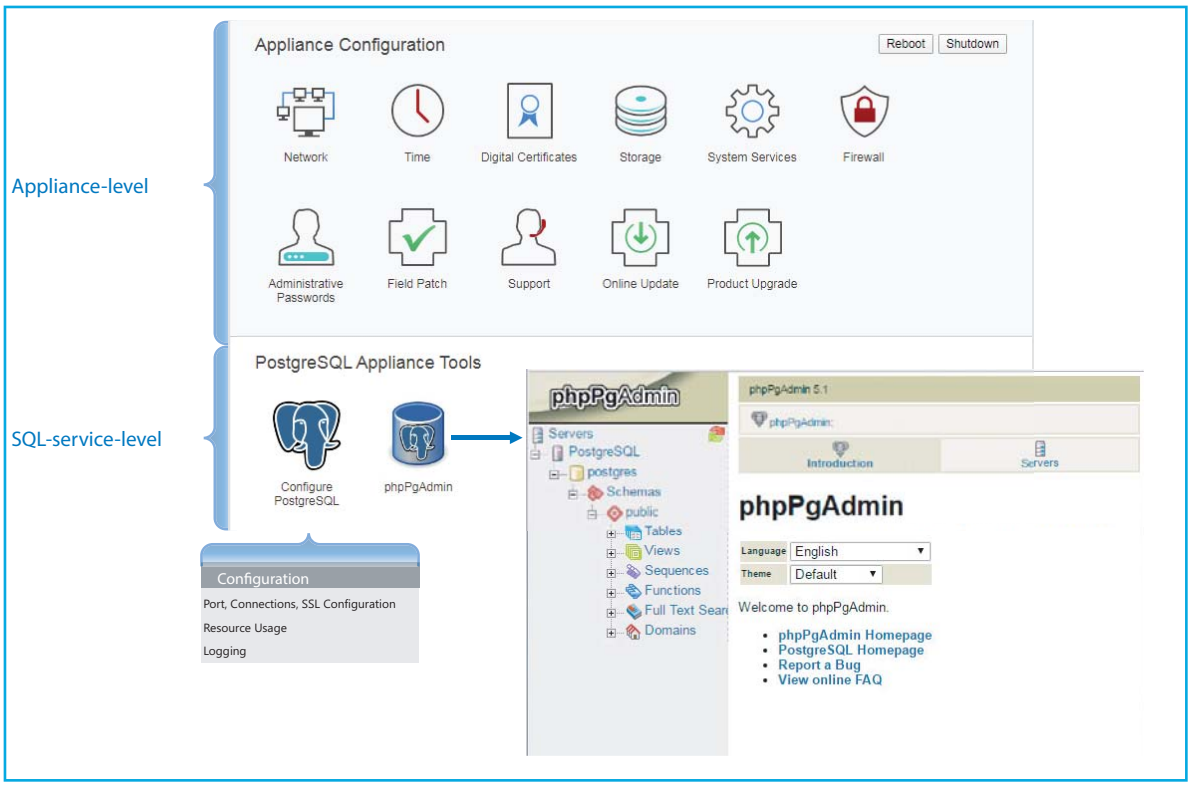
# 2 Port 9443 Appliance Console

**Path:** https://*PostgreSQL_appliance_ip_or_dns*:9443

- Those with the `vaadmin` or `root` user password should always use this to manage virtual-machine-level settings and PostgreSQL service configurations.

***Figure 2-1*** *The Port 9443 PostgreSQL Console*



# 3 Certificates—Managing

**Path:** Port 9443 Appliance Console **Digital Certificates icon**

Use this tool to manage the appliance's certificates and maintain its certificate store.

***Table 3-1*** *Using the Digital Certificates Page*

| Field, Option, or Button | Information and/or Action |
|---|---|
| **Certificates in the Selected Key Store** | |
| ◆ **Key Store** drop-down | ◆ Use this drop-down list to filter whether JVM or Web Application Certificates are listed. |
| ◆ **File** drop-down | ◆ This drop-down list lets you create a new key pair, import a trusted certificate or key pair, export a certificate you have selected in the list, or generate a Certificate Signing Request for a web application that you have selected. |
| ◆ **Edit** drop-down | ◆ This exposes the option to delete a certificate that you have selected. |
| ◆ **View Info** | ◆ This lets you view the information for a selected certificate |
| ◆ **Reload** | ◆ This lets you reload a selected certificate. |

## About Appliance Certificates

- **Self-signed Certificate:** The Micro Focus PostgreSQL appliance ships with a self-signed digital certificate.

  If needed, you can generate appliance certificates and Certificate Sigining Requests for certificate authorities (CA) such as VeriSign or Equifax.

  However, the self-signed certificate included with the appliance should be sufficient for the vast majority of deployments because security practices dictate that databases only be deployed inside an organization's firewall.
- **Java Certificates:** All certificates for the IBM Java package bundled with the underlying SLES OS are installed with the appliance.

## If You Update a Service That the PostgreSQL Appliance Supports

Unless instructed otherwise in the service documentation, you do not need to update certificates when you update a service that the PostgreSQL appliance supports.

# Managing Certificates


- "Creating a New Self-Signed Certificate" on page 12
- "Getting a Certificate Signed by a Certificate Authority" on page 12
- "Activating a Certificate" on page 13
- "Using an Existing Certificate and Key Pair" on page 13


## Creating a New Self-Signed Certificate

1 In the Port 9443 Console **Digital Certificates > Key Store** drop-down list, ensure that **Web Application Certificates** is selected.

2 Click **File** > **New Certificate (Key Pair)**, then specify the following information:

**Alias:** Specify a name that you want to use to identify and manage this certificate.

**Validity (days):** Specify how long you want the certificate to remain valid.

**Key Algorithm:** Select either **RSA** or **DSA**.

**Key Size:** Select the desired key size.

**Signature Algorithm:** Select the desired signature algorithm.

**Common Name (CN):** This must match the server name in the URL in order for browsers to accept the certificate for SSL communication.

**Organizational Unit (OU):** (Optional) Small organization name, such as a department or division. For example, Purchasing.

**Organization (O):** (Optional) Large organization name. For example, Micro Focus

**City or Lacality (L):** (Optional) City name. For example, Provo.

**State or Province (ST):** (Optional) State or province name. For example, Utah.

**Two-letter Country Code (C):** (Optional) Two-letter country code. For example, US.

3 Click **OK** to create the self-signed certificate.

## Getting a Certificate Signed by a Certificate Authority

1 After selecting the self-signed certificate, click **File** > **Certificate Requests** > **Generate CSR**.

2 Sendl the certificate to a certificate authority (CA), such as Verisign, using whatever process they have defined.

Usually, the CA takes your Certificate Signing Request (CSR) and generates an official certificate based on the information in the CSR. The CA then mails the new certificate and certificate chain back to you.

3 After you have received the certificate and certificate chain from the CA:

**3a** Revisit the Digital Certificates page by clicking **Digital Certificates** from the appliance.

**3b** Click **File** > **Import** > **Trusted Certificate**. Browse to the trusted certificate chain that you received from the CA, then click **OK**.

**3c** Select the self-signed certificate, then click **File** > **Certification Request** > **Import CA Reply**.

**3d** Browse to and upload the official certificate to be used to update the certificate information.

On the Digital Certificates page, the name in the **Issuer** column for your certificate changes to the name of the CA that stamped your certificate.

4 Activate the certificate, as described in "Activating a Certificate" on page 13.

## Activating a Certificate

1. On the Digital Certificates page, select the certificate that you want to make active, click **Set as Active**, then click **Yes**.
2. Verify that the certificate and the certificate chain were created correctly by selecting the certificate and clicking **View Info**.

## Using an Existing Certificate and Key Pair

When you use an existing certificate and key pair, use a .P12 key pair format.

1. Click the **Digital Certificates** icon.
2. Click **File** > **Import** > **Trusted Certificate**. Browse to and select your existing certificate, then click **OK**.
3. Click **File** > **Import** > **Trusted Certificate**. Browse to your existing certificate chain for the certificate that you selected in Step 2, then click **OK**.
4. Click **File** > **Import** > **Key Pair**, then browse to and select your .P12 key pair file, specify your password if needed, then click OK.

   Because of a browser compatibility issue with HTML 5, the path to the certificate is sometimes shown as `c:\fakepath`. This does not adversely affect the import process.
5. Continue with “Activating a Certificate” on page 13.

# 4 Field Test Patches—Managing

**Path:** Port 9443 Appliance Console **Field Patch icon**

You can manage field test patches for the PostgreSQL appliance directly from the appliance console. You can install new patches, view currently installed patches, and uninstall patches.

***Table 4-1*** *Using the Field Patch dialog*

| Field, Option, or Button | Information and/or Action |
|---|---|
| **Field Test Patch** | |
| *Install a Downloaded Patch* sub-section | |
| ◆ **Path to Field Patch:** | ◆ Use the **Browse** button to navigate to a downloaded patch, then click **Install** to apply the patch. |
| *Manage Installed Patches* sub-section | ◆ This lists all of the patches that are currently installed, when they were installed, and information about the patch as supplied by Micro Focus. |
| ◆ **Uninstall Latest Patch** button | ◆ Patches must be uninstalled in reverse order and only the latest patch can be uninstalled.<br>◆ Select the latest installed patch, then click this button and confirm that you want the patch uninstalled.<br>You can then install the next patch until you have everything uninstalled as required. |
| ◆ **Download Log File** button | ◆ Click this to download the log file that tracks patch installations. |

# 5 Firewall Configuration

**Path:** Port 9443 Appliance Console **Firewall icon**

***Table 5-1*** *Using the Firewall Details page*

| Field, Option, or Button | Information and/or Action |
|---|---|
| **Firewall Details** | This page is only informational, not editable.<br><br>It lists the port numbers that the PostgreSQL appliance expects to use on your network and the current status of each port. |

# 6 Network Settings—Changing

**Path:** Port 9443 Appliance Console **Network icon**

The settings in this dialog are set during initial deployment.

**IMPORTANT:** Because most services depend on continual database availability, changing network settings on the PostgreSQL appliance should only be done when the services supported are offline.

***Table 6-1*** *Using the Network (DNS, IP, Access restrictions) dialog*

| Field, Option, or Button | Information and/or Action |
|---|---|
| ***DNS Configuration*** section | |
| ◆ **Name Servers:** | ◆ You can modify the name servers. |
| ◆ **Search Domains:** | ◆ If this field is left blank, it is auto-populated with the domain of the appliance hostname. For example, if the hostname of the appliance is `postgresql.mycompany.com`, the domain is auto-populated with `mycompany.com`. |
| ◆ **Gateway:** | ◆ Make sure that this matches any of the other changes you have made in this dialog. |
| ***NIC Configuration*** section | ◆ In this section, you can modify the IP address, hostname, and network mask of any Network Interface Controller (NIC) associated with the appliance. (If you configured multiple NICs for the appliance, you can configure the additional NICs.)<br>◆ In the **NIC Configuration** section, click the ID of the NIC.<br>◆ Edit the IP address, hostname, or network mask.<br>If you change the IP address, you must restart the appliance in order for the change to be reflected.<br>◆ Click **OK**. |
| ***Appliance Administration UI (Port 9443) Access Restrictions*** section | ◆ In this section, specify the IP address of any networks for which you want to allow access to the appliance.<br>◆ Leave this section blank to allow administrative access from any network. |
| **OK** button | ◆ Click this to save your changes, then click **Reconfigure PostgreSQL Server**.<br>**WARNING:** This stops and restarts the PostgreSQL server. Only do this when supported services are offline as well. |
| **Cancel** button | ◆ Click this to cancel the changes you have made. |

# 7 Online Updates—Managing

**Path:** Port 9443 Appliance Console **Online Update icon**

***Table 7-1*** *Using the Online Update dialog*

| Field, Option, or Button | Information and/or Action |
|---|---|
| **Online Update (Automatic Update Schedule: *X*)** | ◆ This is the dialog title and it also shows which Schedule option is selected (represented by *X*). |
| **Register Online Update Service** dialog | ◆ This dialog appears whenever the appliance is not registered with an update service. For example, the first time Online Update icon is clicked or when a service has been de-registered.<br>◆ You must register the appliance for it to receive online updates. |
| ◆ **Service Type:** | ◆ Select the service type that the appliance will use to obtain online updates: a local Subscription Management Tool (SMT) or the Micro Focus Customer Center |
| ◆ **Local SMT** | This is a server from where you can download the software updates and automatically install them to update the product.<br>◆ **Hostname:** The hostname of the server from where you want the appliance to download software updates.<br>◆ **SSL cert URL (optional):** The path to the SSL certificate for encrypting communications with the server.<br>◆ **Namespace path (optional):** To enable the client to use the staging group, specify a value. Do not specify any value if you want to use the default production repositories. |
| ◆ **Micro Focus Customer Center** | ◆ **Email:** Your email address for registering the appliance to receive updates.<br>◆ **Activation Key:** This displays in your NCC Portal in the same dialog as your product license.<br>◆ **Allow Data send:** Select from the following options if you want to share information with the Micro Focus Customer Center:<br>◆ **Hardware Profile:** Shares the hardware information.<br>◆ **Optional Information:** Shares information such as host type, productversion, release, architecture, timezone, and processor. |

| Field, Option, or Button | Information and/or Action |
|---|---|
| **Update service: *X*** | ◆ After you register the appliance for an update service, the service name appears in this field (represented by *X*). |
| ◆ Patches drop-down | ◆ **Needed Patches:** Selecting this option lists that patches that will be installed during the next manual or automatic update.<br>◆ **Installed Patches:** Selecting this option lists all patches that have been previously installed. |
| ◆ **Schedule** drop-down | ◆ Click this to set a schedule for when the appliance will download updates.<br>◆ If you select **Manual**, the appliance immediately downloads all available patches.<br>◆ If you select **Daily**, **Weekly**, or **Monthly**, you must then choose to apply either **All Needed Patches** or **Security Patches Only**.<br>◆ Optionally, you can specify whether to **Automatically agree with all license agreements** and **Automatically install all interactive patches**. |
| ***Update Now tab*** | ◆ This is selectable only when the Patches drop-down is set to **Needed Patches**.<br>◆ After clicking the option, you must choose to apply either **All Needed Patches** or **Security Patches Only**.<br>◆ Optionally, you can specify whether to **Automatically agree with all license agreements** and **Automatically install all interactive patches**. |
| ***View Info tab*** | ◆ Clicking this displays information such as a brief summary of the patch and the bug fixes in the patch. |
| ***Register tab*** | ◆ Clicking this displays the appliance's registration status, and an option to **Deregister** the appliance.<br>◆ If you deregister the appliance, the Register Online Update Service dialog reappears. |
| ***Refresh tab*** | ◆ Clicking this refreshes the status of updates on the Appliance. |

# 8 Passwords and SSH Access—Changing for vaadmin and root

**Path:** Port 9443 Appliance Console **Administrative Passwords**

**NOTE:** Changing both passwords requires logging in as `root`. If you log in as `vaadmin`, you can only change the `vaadmin` password.

***Table 8-1*** *The Administrative Passwords dialog*

| Field, Option, or Button | Information and/or Action |
|---|---|
| vaadmin | ◆ Acting as either `vaadmin` or `root`, type the current password, type and confirm the new password, and click **OK**. |
| root | ◆ Acting as `root`, type the current password, type and confirm the new password, and click **OK**. |
| root SSH Access | ◆ Acting as `root`, select or deselect **Allow root access to SSH** and click **OK**.<br><br>SSH is disabled by default. For information about how to start SSH on the appliance, see Chapter 13, “System Services—Managing,” on page 35. |

# 9 PostgreSQL Administration (phpPgAdmin)

**Path:** Port 9443 Appliance Console **phpPgAdmin Icon**

This open source tool is included for your convenience in managing the PostgreSQL appliance. For information, visit the phpPgAdmin FAQ site on sourceforge.net (http://phppgadmin.sourceforge.net/doku.php?id=faq_docs).

The default username/password for the phpPgAdmin tool is `postgres`/`postgres`.

# 10 PostgreSQL—Configuring

**Path:** Port 9443 Appliance Console **PostgreSQL Icon**

The following sections provide a brief summary of the configuration dialogs. For in-depth information, please see the PostgreSQL online documentation.

## 10.1 Port, Connections, and SSL Configuration

**Path:** Port 9443 Appliance Console **PostgreSQL Icon > Port, Connections, and SSL Configuration**

Also see the PostgreSQL Connections and Authentications documentation

***Table 10-1*** *Using the Port, Connections, and SSL Configuration dialog*

| Field, Option, or Button | Information and/or Action |
|---|---|
| **PostgreSQL Port** | ◆ The standard port is selected automatically and is used for both SSL and non-SSL communication. |
| **Listen Addresses** | ◆ These set the TCP/IP addresses on which the PostgreSQL service will listen for incoming connections from clients. Micro Focus services, such as Vibe and Filr are considered SQL clients from a PostgreSQL perspective.<br>The following conventions apply:<br>◆ ***** Indicates all IP interfaces (IPv4 and IPv6) can connect.<br>◆ **0.0.0.0** Indicates that the PostgreSQL server will listen for all IPv4 addresses.<br>◆ **An empty field** Indicates localhost, and only local loopback socket connections are allowed. |
| **Allowed Connections** | ◆ This sets the client addresses that are allowed to communicate with the PostgreSQL server. Allowed values are:<br>◆ Host names<br>◆ IP address ranges<br>For example, `0.0.0.0/0` represents all IPv4 addresses<br>◆ Special key words<br>See the address in the PostgreSQL documentation on the web for more information. |

| Field, Option, or Button | Information and/or Action |
|---|---|
| **Max Connections** | ◆ This specifies the maximum number of connections allowed to the DB server. The default is 100.<br><br>See max_connections in the PostgreSQL documentation on the web. |
| **Enable SSL** | ◆ If enabled, this requires that the public key be exported/downloaded and then imported into each client machine's JVM store. |
| **Public SSL Expiration Date** | ◆ Informational only.<br><br>Each self-signed cert has a 2-year lifespan from the creation date. |
| **Download Public Certificate** button | ◆ Click this to download the installed certificate for importing to the client machine's JVM store |
| **Create New Self-Signed Certificate** button | ◆ Click this to generate a new self-signed certificate with a renewed serial number, key identifier, and 2-year lifespan.<br><br>Newly generated certificates must be downloaded and imported to the client machine JVM stores. |

# 10.2 Resource Usage Configuration

**Path:** Port 9443 Appliance Console **PostgreSQL Icon > Resource Usage Configuration**

***Table 10-2*** *Using the Resource Usage Configuration dialog*

| Field, Option, or Button | Information and/or Action |
|---|---|
| **Shared Buffers** | ◆ The percentage of appliance RAM that is shared with PostgreSQL. The PostgreSQL documentation recommends setting this to 25% of system memory:<br><br>`If you have a system with 1GB or more of RAM, a reasonable starting value for shared_buffers is ¼ of the memory in your system. If you have less RAM you'll have to account more carefully for how much RAM the OS is taking up; closer to 15% is more typical there.`<br><br>`There are some workloads where even larger settings for shared_buffers are effective, but given the way PostgreSQL also relies on the operating system cache, it's unlikely you'll find using more than 40% of RAM to work better than a smaller amount.`<br><br>For more information, see the PostgreSQL Resource Consumption documentation. From the PostgreSQL tuning documentation |

| Field, Option, or Button | Information and/or Action |
|---|---|
| **Effective Cache Size** | ◆ This is the disk cache that is available for a single query. The PostgreSQL documentation recommends setting this to half of total memory:<br><br>`Setting effective_cache_size to ½ of total memory would be a normal conservative setting, and ¾ of memory is a more aggressive but still reasonable amount.`<br><br>`You might find a better estimate by looking at your operating system's statistics.`<br><br>See also, effective_cache_size in the PostgreSQL Query Planning section of the PostgreSQL documentation. |

# 10.3 Logging Configuration

**Path:** Port 9443 Appliance Console **PostgreSQL Icon > Logging Configuration**

***Table 10-3*** *Using the Logging Configuration dialog*

| Field, Option, or Button | Information and/or Action |
|---|---|
| **Log Rotation Age** | ◆ See the PostgreSQL Maintenance documentation on the web. |
| **Log Rotation Size** | ◆ See the PostgreSQL Maintenance documentation on the web. |

# 11 Storage—Expanding

## Expanding the /vastorage partition

**Path:** Port 9443 Appliance Console > **Storage icon**

***Table 11-1*** *Using the Storage Expansion dialog to expand the /vastorage partition*

| Field, Option, or Button | Information and/or Action |
|---|---|
| **Prerequisite** | ◆ Storage expansion requires unallocated free disk space associated with the `/vastorage` partition.<br>◆ Shut down the appliance.<br>◆ Use the tools and processes provided by your hypervisor vendor to expand the virtual disks that contain the partitions you want to expand.<br>◆ Restart the appliance so that the operating system can detect the disks that have been expanded. |
| **Appliance Disks Containing Unallocated Free Space:** If no disks are listed, nothing is available to be expanded. | |
| Expand partitions | ◆ After selecting the devices you want to expand, click this option.<br>◆ Restart the appliance again so that the management software detects that the unallocated disk space has been used. |

## Expanding the /var Partition

The Storage Expansion Option in the Port 9443 Appliance Console must temporarily unmount the disk target in order to complete a disk expansion. However, because the `/var` partition contains the system log volume, it is constantly being written to and cannot be unmounted while the system is running.

Therefore, expanding the /var partition requires a manual process, as follows:

1. Shut down the appliance and use the hypervisor management tools to increase the size of Disk 3.
2. Start the appliance.
3. Using your management browser, access the Port 9443 Appliance Console > **Storage** icon.
4. Select the `/var` partition and click **Expand Partitions**.
5. At the appliance's terminal prompt, log in as `root`.
6. Edit `/etc/fstab`, remove the line: `/dev/sdc1 /var ext3 rw 0 0` and save the change.

7 Shut down the appliance.

8 Start the appliance in failsafe mode by using the down arrow on the boot screen.

9 At the appliance's terminal prompt, log in as `root`.

10 Edit `/etc/fstab` and insert the line: `/dev/sdc1 /var ext3 rw 0 0`, then save the change.

11 Enter the following command:

```
/opt/novell/base_config/va_expand_partition
```

12 Restart the appliance.

The appliance is now using the expanded `/var` partition.

# 12 Support—Submitting Configuration Files to Micro Focus Support

**Path:** Port 9443 Appliance Console **Support icon**

Sometimes Micro Focus Support needs to review your appliance's system configuration when processing a service request. This dialog facilitates the process and saves you time.

***Table 12-1*** *Using the Support dialog*

| Field, Option, or Button | Information and/or Action |
|---|---|
| **Support** | |
| Automatically send the configuration to Micro Focus using FTP. | ◆ With this option selected, you can FTP your configuration to Micro Focus Support and include the **Service Request Number** if desired.<br>◆ The configuration is sent when you click **OK** and confirm your selection. |
| Download and save the configuration file locally, then sent it to Micro Focus manually. | ◆ With this option selected, the configuration is downloaded when you click **OK** and confirm your selection.<br>◆ You must then send the file to Micro Focus through email or some other arrangement. |
| **OK** or **Cancel** | ◆ Click **OK** to send or download the file, or click **Cancel** to exit. |

# 13 System Services—Managing

**Path:** Port 9443 Appliance Console **System Services icon**

***Table 13-1*** *Using the System Services dialog*

| Field, Option, or Button | Information and/or Action |
|---|---|
| **Available System Services:** | ◆ **SSH:** This is the SSH service that is running on the appliance.<br>◆ **Jetty:** This is the Jetty service that is running on the appliance. Click **Download** to access the `jetty.stderrout.out` file.<br>◆ **PostgreSQL:** This is the PostgreSQL service that is running on the appliance. Click **Download** to access the `PostgreSQLd.log` file. |
| ◆ **Action** drop-down | ◆ Use this to **start**, **stop**, or **restart** the selected service.<br>Before doing any of these, make sure you understand how your action will affect the appliance. |
| ◆ **Options** drop-down | ◆ Use this to set the selected service to start automatically or require a manual start. |
| ◆ **Refresh List** | ◆ Click this if the information displayed is outdated. |

# 14 Time—Changing the Appliance's NTP Configuration

**Path:** Port 9443 Appliance Console **Time icon**

This dialog lets you adjust the NTP configuration settings that were established when the appliance was deployed.

***Table 14-1*** *Using the Time dialog*

| Field, Option, or Button | Information and/or Action |
|---|---|
| ◆ **NTP Servers:** | ◆ Type a new default NTP server. |
| ◆ **Region:** | ◆ Click the drop-down list and select a region for the appliance. |
| ◆ **Time Zone:** | ◆ Click the drop-down list and select a time zone for the appliance. |
| ◆ **Hardware clock set to UTC** | ◆ Use this option to change the hardware clock setting. |

# 15 Upgrading PostgreSQL to a Newer Version

**Path:** Port 9443 Appliance Console **Product Upgrade icon**

Online Product Upgrades work as follows:

1 Your PostgreSQL appliance must be registered with Micro Focus for online updates, then when a product upgrade is released, an associated *update* is listed with any other available product updates, and the Product Update icon displays a notification badge.

2 Open the Product Update dialog and apply all of the available patches, etc.

3 When the update process completes, the Product Upgrade icon displays a notification badge.

4 When you are ready to upgrade the PostgreSQL appliance, shut down the other appliances in the correct order for your service type.

**4a** Access the Port 9443 console on each service appliance and click **Shutdown**.

For example, shut down all of the TeamWorks or Filr appliances.

**4b** When the service appliances are all shut down, access the Port 9443 console on each search appliance and click **Shutdown**.

For example, shut down all of the TeamWorks Search or Filr Search appliances.

---

5 **IMPORTANT:** When all of the other appliances are shut down, you must reboot the PostgreSQL appliance before continuing with the upgrade.

---

**5a** In the PostgreSQL appliance's Port 9443 console, click **Reboot**.

**5b** Wait for the appliance to shut down and restart.

6 When the PostgreSQL appliance has restarted, access the Port 9443 console and open the Upgrade dialog by clicking the Product Upgrade icon.

7 Read the instructions displayed in the dialog and verify that all of the prerequisites and other requirements are met.

8 Then **Start** the upgrade and complete the process as prompted.

**IMPORTANT:** Make sure to register the appliance for the Online Update channel that is associated with the new, upgraded version.

9 When the upgrade is complete, start the search appliances first, and then start the service appliances.

If you need more information about starting and shutting down your deployment, see the documentation for your product.

***Table 15-1*** *Using the Product Upgrade dialog*

| Field, Option, or Button | Information and/or Action |
|---|---|
| Information pane | **NOTE:** The primary documentation for upgrading Micro Focus appliances is always the documentation for the product that includes the appliance. Make sure to check for any upgrade instructions in that documentation, including in the Release Notes.<br><br>The information pane includes a brief summary of prerequisites and other information that is pertinent to the upgrade being applied. |
| **Start** button | Click this to download the upgrade and start the upgrade process. |
| **Close** button | Click this to close the dialog and return to the Home panel. |